

## **REMARKS**

The issues outstanding in the Final Rejection mailed March 20, 2009, are the rejections under 35 U.S.C. 112 and the rejections under 35 U.S.C. 102 and 103. Reconsideration of these issues, in view of the following discussion, is respectfully requested.

### **Rejection Under 35 U.S.C. 112**

Claims 1-6 and 8-31 have been rejected under 35 U.S.C. 112, second paragraph. The Examiner is thanked for noting the typographical error in the claim, which has been corrected. It is moreover noted that an additional typographical error has been corrected in a claim, in which the number "1000" was incorrectly typed with an additional 0. It is evident from the original claims, and from the specification at page 1, line 30, that this was a typographical error.

Reconsideration of the rejection under 35 U.S.C. 112 is respectfully requested.

### **Rejections Under 35 U.S.C. 102 and 103**

Claims 1-6 and 8-31 have been rejected under 35 U.S.C. 102(b), or in the alternative 103, over Allen (WO '843). Reconsideration of this rejection is respectfully requested. It is argued, at page 2 of the office action, that Allen discloses polytriarylaminines with fractions having number average molecular weights "above and below 5000." The office action notes table 1, example 2, at page 14 of the reference. This table discloses three solids, having molecular weights of 3100, 2900 and 7000. With the clarification of claim 1 to address the typographical error in the molecular weight, it can be seen that this disclosure does not teach, much less suggest, a composition with a first organic semiconducting compound having a number average molecular weight of *at least 5000* **and** a second semiconducting compound having a number average molecular weight of 1000 or less. None of the materials disclosed in this table have a molecular weight of 1000 or less.

In addition, it is not seen that the examples of Allen teach the use of these various materials in combination, as in the present claims. In fact, it can be seen from example 1, in which the materials in table 1 are produced, that solid 1A is used to produce solid 1B1, which in turn is used to produce solid 1B2. It is not seen that the combination of these materials and organic semiconductors

used in combination is taught. Not only for the reasons above does Allen fail to teach the present claims, and thus does not anticipate them, but it is not seen that one of ordinary skill in the art would have any motivation, reason or direction to produce a combination such as that presently claimed, in view of the teachings of Allen. Thus, the present claims are also non-obvious over this reference. Accordingly, withdrawal of the rejection under 35 U.S.C. 102/103 is respectfully requested.

It is further argued in the office action that the claims do not recite a lower level of charge mobility for the material with the lowest charge mobility. In order to provide further basis for patentability the claims have been amended, as supported at page 2 of the specification, to recite that both semiconducting compounds have a charge carrier mobility of at least  $10^{-5}$ . This provides further basis for withdrawal of the rejections under 35 U.S.C. 102/103. It is noted that the charge mobility of the compounds in table 1 of Allen is less than that recited in the present claims.

Claims 1-6 and 8-31 have also been rejected under 35 U.S.C. 102(b) or in the alternative 103 over Allen (WO '537). Reconsideration of this rejection is also respectfully requested.

The office action cites table 8 at page 71 of the WO. Again, while this table appears to disclose various materials with different molecular weights, it is not seen that Allen '537 teaches the use of one material having molecular weight of at least 5000, and a second material having a molecular weight of 1000 or less. Similarly, the disclosure does not teach that both materials have the specified charge mobility. While it is argued, at page 3 of the office action, that the Examiner "cannot determine whether or not the reference inherently possesses" charge mobility within the scope of the claim, it is clear that charge mobilities for the various materials disclosed in the reference vary widely. Thus, the selection of materials having specific charge mobility as recited in the claims is not taught or suggested to one of ordinary skill in the art. Accordingly, withdrawal of this rejection is also respectfully requested.

Finally, claims 1-3, 11, 14-17, 22, 24, 28 and 31 remain rejected under 35 U.S.C. 102(b) over Doi. Reconsideration of this rejection is again respectfully requested. It appears, from page 4 of the office action, that the present argument is that the polyfluorenes of Doi would meet the molecular weight requirements of the claims. However, the claims, as noted, require one material having a molecular weight of at least 5000, and a second material having a molecular weight of 1000 or less. It is again respectfully submitted that Doi does not teach the combination of two such materials, even if various polyfluorenes disclosed therein might have differing molecular weights. Accordingly,

withdrawal of this rejection is also respectfully requested.

In conclusion, it is submitted that none of the cited references disclose the concept recited in the present claims. Accordingly, it is submitted that the claims are in condition for allowance, and passage to issue is respectfully requested. However, should the Examiner have any questions or comments, he is cordially invited to telephone the undersigned at the number below.

The Commissioner is hereby authorized to charge any fees associated with this response to Deposit Account No. 13-3402.

Respectfully submitted,

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